

# MAP EnhancerPad

More shelf life thanks to inert gas development



# Durability tuning

## For meat and fish in modified atmosphere packaging

Oxygen is a key factor in food spoilage, which is why many foods are packaged in a protective gas atmosphere to slow down bacterial growth and extend shelf life.

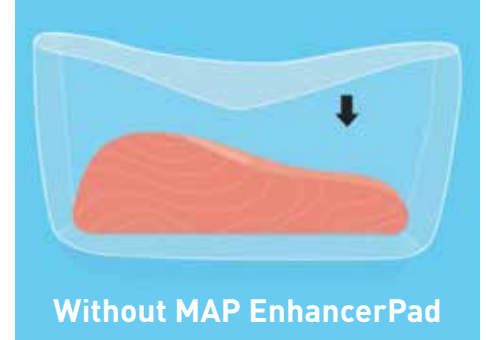
In this respect, shielding gas is also an essential component for

- improve food quality and shelf life,
- to be able to dispense with preservatives,
- reduce food waste and
- improve the attractiveness of packaged products.

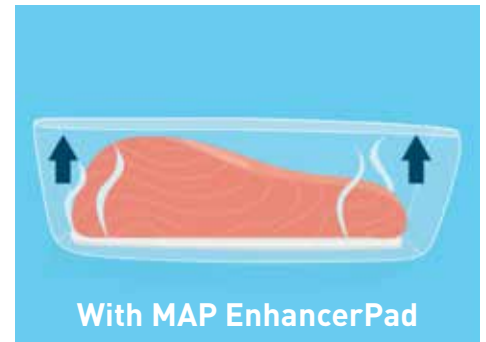
However, meat and fish in particular also absorb part of the protective gas composition via their surface. This can lead to changes in the composition and a reduction in the volume of gas inside the packaging, causing it to collapse.

This is precisely where the MAP EnhancerPad comes in, absorbing the released liquid and emitting additional protective gas to extend the shelf life and prevent the packaging from collapsing.

At the same time, the MAP EnhancerPad makes it possible to reduce the volume of protective gas required, so that plastic packaging can also be significantly reduced in size, which has numerous positive effects.



**Without MAP EnhancerPad**  
The shielding gas is absorbed and the packaging collapses



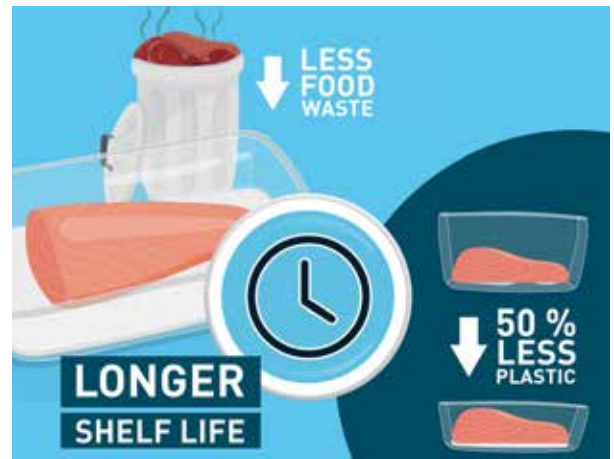
**With MAP EnhancerPad**  
Protective gas development for smaller and non-collapsing packaging





### Convincing reasons for the MAP Enhancer Pad:

- High absorption capacity thanks to SuperCore® cellulose - with additional superabsorber if required
- Active production of CO<sub>2</sub> on contact with released liquid
- Longer shelf life due to active improvement of the protective atmosphere
- Adaptation of the volume of CO<sub>2</sub> released to the requirements of the packaged food product
- Avoidance of collapsing packaging
- More attractive packaging without free liquids
- Significant reduction in packaging size and saving on plastic
- Lower logistics costs in transportation and storage thanks to significantly smaller packaging



## White Tiger Shrimps

### Case study

#### Initial situation

MAP tray with 440 g weight  
White tiger prawns (*Litopenaeus vannamei*)  
Shelf life without pad - 5-day shelf life

#### Test Pad

MapEnhancer XCO40-170-8013010  
Microbiological examination and sensory analysis according to DGHM\*

#### Result after 10 days

**Microbially and sensorially flawless**

#### Result after 14 days

**Microbially and sensorially flawless**



With the use of a pad XCO40-170- 8013010 the shelf life could be more than doubled.

\* German Society for Hygiene and Microbiology



## A strong partner for powerful ideas

### We offer you:

- Development expertise for every technical product requirement.
- A wide range of cellulose-based materials and airlaid specifications with an excellent price/performance ratio.
- Integration of additives such as superabsorbents (SAP/SAF), if required.
- Biodegradability in accordance with EN 13432 and production with low CO2 emissions.
- Flexible product configurations to optimally support your production processes.
- More than 25 years of experience in the production of high-quality components for the food, hygiene and medical industries.
- Reliable delivery thanks to four high-capacity production facilities.



### SuperCore: clean, barrier-free absorption power

Our **SuperCore®** consists of pure cellulose with excellent absorption properties. The special manufacturing technology stands for an **airlaid without synthetic additives or binders**, which leads to significantly better absorption and liquid distribution.

At the same time, our **production takes place without water and without fossil fuels**, thus ensuring a **unrivaled low CO2 footprint** of our products.

## McAirlaid's Vliesstoffe GmbH



### Corporate Head Office

Münsterstr. 61-65  
D-48565 Steinfurt  
+49 2552 93340



### Plant 1

Zum Eichberg 2  
D-37339 Berlingerode  
+49 36071 90090



### Plant 2

Rudolf-Diesel-Str. 6  
D-37308 Heilbad Heiligenstadt  
+49 3606 59090



### Plant 3

Steigerstr. 10  
D-59379 Selm  
+49 2592 914150



### USA | McAirlaid's Inc.

180 Corporate Drive  
Rocky Mount VA 24151  
+1 540 352 5050